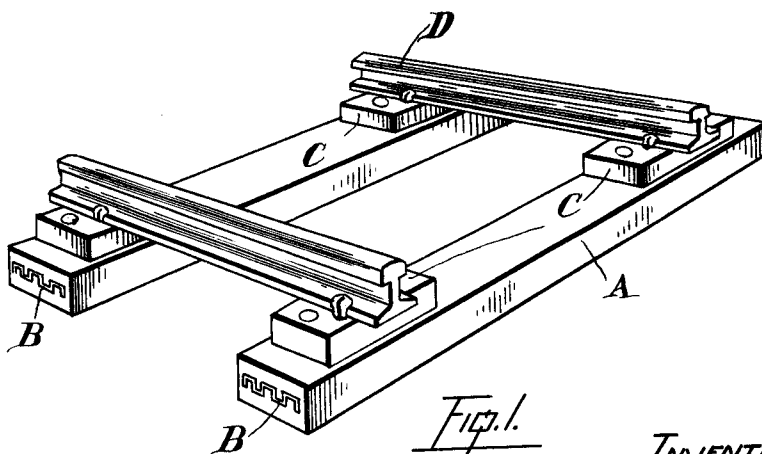
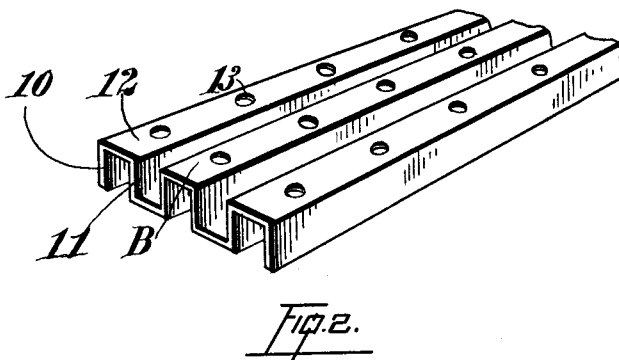
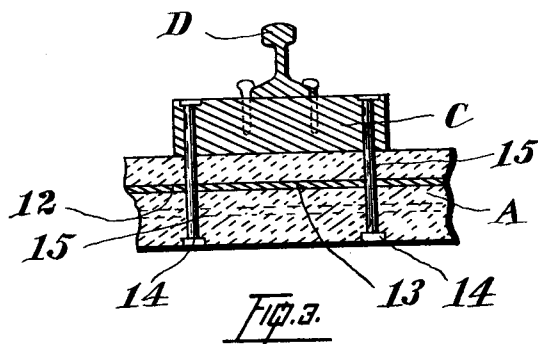


S. L. KYLE.
 REINFORCED CONCRETE OR CEMENTITIOUS RAILWAY TIE.
 APPLICATION FILED AUG. 20, 1912.

1,051,898.

Patented Feb. 4, 1913.



WITNESSES

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SAMUEL LAW KYLE, OF OTTAWA, ONTARIO, CANADA.

REINFORCED CONCRETE OR CEMENTITIOUS RAILWAY-TIE.

1,051,898.

Specification of Letters Patent.

Patented Feb. 4, 1913.

Application filed August 20, 1912. Serial No. 715,999.

To all whom it may concern:

Be it known that I, SAMUEL LAW KYLE, a subject of the King of Great Britain, residing at Ottawa, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Reinforced Concrete or Cementitious Railway-Ties, of which the following is the specification.

My invention relates to improvements in reinforced concrete or cementitious railway ties, and the objects of the invention are to provide a simple and effective form of tie which may be manufactured with simple apparatus and at low cost, and at the place where required to be used whereby freight charges on the ties may be eliminated and the cost of production reduced.

Further objects are to dispose of the reinforcing material to a maximum of advantage and to lock the same in position within the tie.

Further objects still are to enable the rails to be readily attached to the tie by the usual means by spikes, avoiding the necessity of applying any bolts, screws or other complicated form of locking means, and it consists essentially of the improved construction hereinafter more fully set forth and described in the accompanying specification and drawings.

In the drawings, Figure 1 is a perspective view of a portion of the track construction embodying the present invention. Fig. 2 is a perspective view of the reinforcing material. Fig. 3 is a cross sectional detail from the rail.

Referring to the drawing, A represents the tie proper which is molded from concrete or other cementitious material in a suitable mold of usual shape.

Following the present invention each tie contains a reinforcing member B which extends from end to end of the same. This member is formed of thin sheet metal such as sheet steel and is provided with reversed corrugations as shown. Each corrugation comprises vertical side walls 10 and 11 and a horizontal wall 12, the side walls being at substantially right angle to the horizontal wall whereby all the horizontal walls will lie in parallel planes which will be parallel to the upper and lower surface of the tie and all the side walls will lie in parallel planes which will be parallel to the sides of the tie.

The corrugations are also formed with perforations 13 through which the concrete may flow to securely lock the reinforcing material on the tie.

C represents bearing members of wood or other suitable material which are placed on top of the tie to receive the rails D, but conveniently held in position by means of square headed bolts 14 which extend through suitable perforations 15 molded in the tie. The bearing members are of such sufficient thickness as to enable the rails to be spiked through in the usual way.

In practice the tie proper will be practically embedded in the ballast of the track construction leaving the bearing members C projecting about the same to support the rail thus guarding against an end and side movement.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention, within the scope of the claims, constructed without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specification and drawings, shall be interpreted as illustrative and not in a limiting sense.

What I claim as my invention is:

1. A reinforcing cementitious tie having a reinforcing member formed with reversed corrugations extending from end to end of the tie and from side to side thereof and bearing members of wood on top of the tie, upon which the rails rest, and fastening means for said bearing members extending through the tie and bearing members.

2. A reinforcing cementitious tie having a reinforcing member formed from a plurality of reversed corrugations extending from end to end of the tie, each of said corrugations comprising vertical side walls parallel with the sides of the tie and a horizontal wall parallel with the top and bottom of the tie, bearing members on the tie and fastening means for said bearing members extending through the tie.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

SAMUEL LAW KYLE.

Witnesses:

RUSSEL S. SMART,
PEARLE M. GARROW.